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PATENT NO. : 7,828,917

APPLICATION NO.: 10/585,472

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INVENTOR(S) : Noriaki Onodera et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In "Assignee" Reads
 "Nippon Steel Corporation, Chiyoda-ku, Yokyo (JP)"

Should Read
 "Nippon Steel Corporation, Chiyoda-ku, Tokyo (JP)"

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(12) **United States Patent**
Onodera et al.

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(54) **RAIL MANUFACTURING METHOD**

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C21D 9/04 (2006.01)
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 148/645; 148/646

(58) **Field of Classification Search** 148/581,
 148/646, 584, 585, 580, 645

See application file for complete search history.

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(57) **ABSTRACT**

A rail manufacturing method is provided, in which a billet is
 hot-rolled into a rail form and the rail is cooled to ambient
 temperature. The foot part of the rail can be mechanically
 restrained to improve the straightness of the rail during at
 least the period of cooling where the surface temperature is
 between 800° C. and 400° C. In the subsequent cooling pro-
 cess, at least while the surface temperature of the foot of the
 rail is between 400° C. and 250° C., the rail is kept in an
 upright state, and cooled naturally without using insulation or
 accelerated cooling.

9 Claims, 1 Drawing Sheet

